

A NEW SPECIES OF *EUCROSIA*
(AMARYLLIDACEAE) FROM NORTHERN PERU

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ABSTRACT

Eucrosia calendulina is described as new from northern Peru. The species is related to *E. aurantiaca*, an Ecuadorean endemic, but differs by its smaller stature, fewer flowers, non-synchronized anthesis, orange perigone, and elevational range.

RESUMEN

Eucrosia calendulina se describe como nueva del norte de Perú. Esta especie está relacionada con *E. aurantiaca*, endémica de Ecuador, de la cual se diferencia por su menor estatura, por tener menos flores, su anthesis no sincronizada, el perigonio anaranjado, y su rango de distribución altitudinal.

The genus *Eucrosia* Ker Gawl. is a small but polymorphic genus of Amaryllidaceae endemic to the central Andean region (Meerow 1987), allied to *Phaedranassa* Herb., *Raubia* Traub, and more distantly to *Stenomesson* Herb. Seven species were recognized by Meerow (1987), of which only three occurred in Peru; the remaining species were all Ecuadorean. Since that time, a new collection from an upper montane locality in northern Peru has revealed the existence of a previously undescribed species, further confirmed by cultivation of living material for several years.

***Eucrosia calendulina* Meerow & Sagást., sp. nov.** (Figs. 1, 2). TYPE: PERÚ. Cajamarca, Contumazá, entrada al Bosque Cachil, 2500 m, 12 Nov 1994, *Sagástegui & Leiva 15428* (HOLOTYPE: HAO; ISOTYPES: F, FLAS).

Species nova *E. aurantiacae* affinis sed ab ea statura humiliore, anthesi non simultanea, floribus paucioribus, colore perigionali calendulino differt; haec species et iam, in altitudinibus altioribus quam *E. aurantiaca* habitat.

Geophyte from tunicate bulbs with contractile roots; bulb solitary, ovoid, 5–6 cm long, ca. 3 cm wide, tunics dark brown. Leaves hysteranthous;

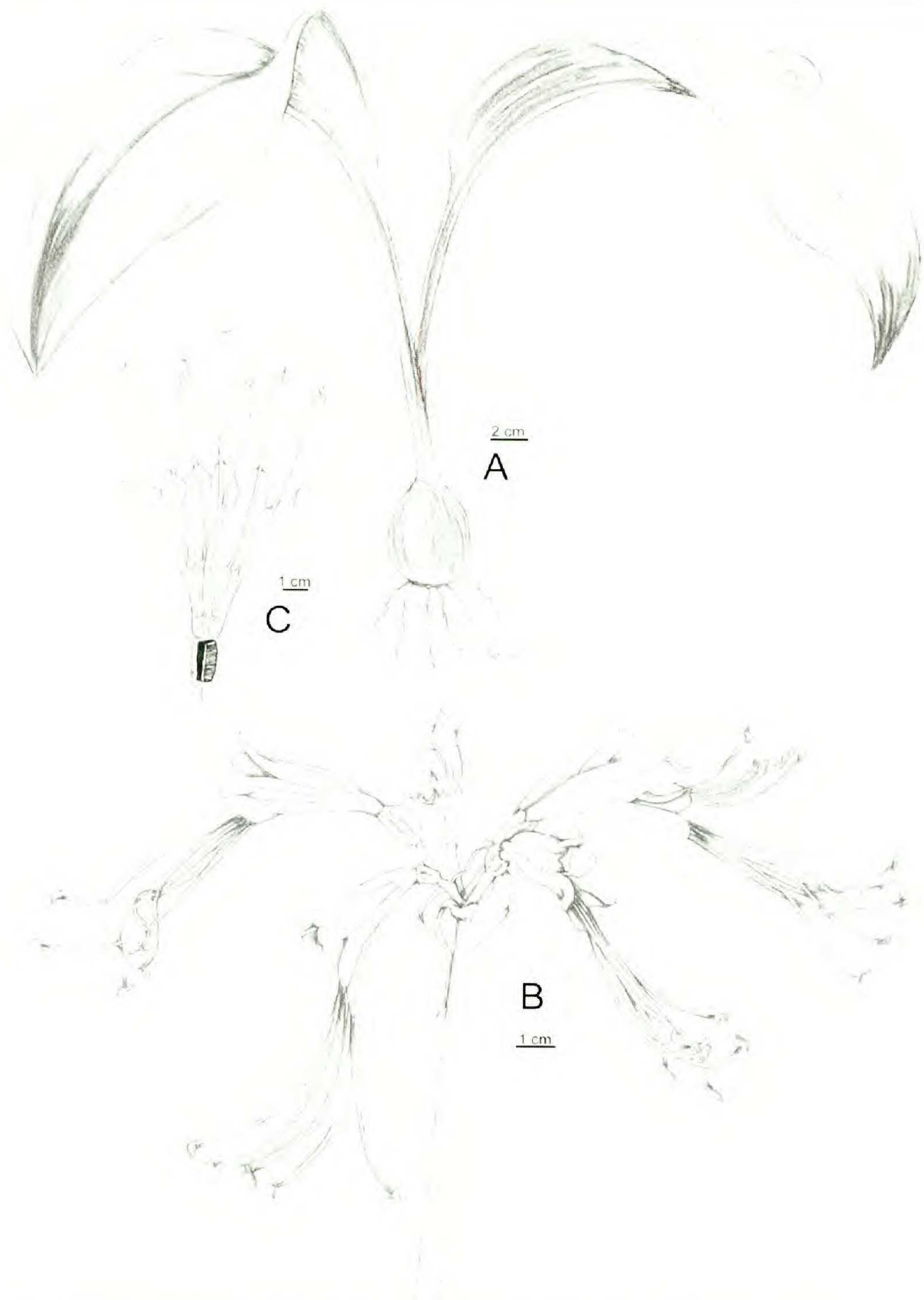


FIG. 1. *Encrosia calendulina* (Sagástegui & Leiva 15428). A. Bulb in vegetative state. B. Inflorescence. C. Longitudinal dissection of flower.

petiole 12–15 cm long, 8–9 mm thick, channeled adaxially; lamina broadly elliptic, ca. 26 cm long, ca. 13 cm wide, apex shortly acuminate, base shortly attenuate, slightly and shallowly plicate, green adaxially, glaucous abaxially with a conspicuous midrib. Inflorescence scapose, umbellate (a series of



FIG. 2. *Eucrosia calendulina*.

reduced helicoid cymes), the component cymes not synchronized at anthesis; scape 50–65 cm tall, terete, glaucous, the pith more or less solid but developing a narrow central channel in distal half, terminated by 2 greenish-white, ovate-lanceolate bracts enclosing flower buds; bracts 2.5–3 cm long, soon marcescent; pedicels 7.5–16 mm long, slender. Flowers 7–10, without fragrance, protandrous; perigone funnelform-tubular, zygomorphic and laterally compressed, of six subequal tepals in two whorls united below into a tube, with one inner and two outer tepals forming a pseudolabellum surrounding stamens and style; perigonial tube 6.5–7.5 mm long, 5.2–5.5 mm wide, abruptly dilated at the base, green; tepals lanceolate, RHS Orange-Red 30A, waxy, slightly unguiculate, concave, keeled; outer tepals ca. 30 mm long, ca. 7 mm wide, apiculate; inner tepals 26–28 mm long, ca. 9 mm wide, obtuse to emarginate at slightly callose apex; stamens six, long-exserted, declinate and much exceeding perigone in length; filaments of four different lengths from 8–9 cm, green except white at base, connate in lower 1 mm, with a globose nectar gland present at base of each; anthers oblong, green, 3.5–4 mm long, dorsifixed and versatile, dehiscing introrsely by a longitudinal furrow; pollen green; style filiform, 10–11 cm long, exceeding filaments, declinate at first, ascendent when receptive; stigma ca. 1.3 mm wide, capitate, papillate; ovary trigonous-ellipsoid, 8–8.5 mm long, 4–4.5 mm wide, trilocular, septal nectaries present; ovules ca. 20 per loc-

ule, axile, biseriate, anatropous, compressed. Fruit not seen (but presumed as for genus: a glaucous, turbinate, triloculicidal capsule, turning brown at dehiscence with the pedicel elongating in fruit and with numerous, flat, obliquely winged, blackish-brown encrusted seeds). $2n = 46$.

Our new species is closely related to *E. aurantiaca* (Baker) Pax, but differs from that species in its overall smaller stature, lower number of flowers, non-synchronized anthesis, flower color, and elevation range. *Eucrosia aurantiaca* is a much more robust plant with 10–17 yellow (rarely pink) flowers that all open at once on the scape. It is endemic to Ecuador, and is not known to occur above 1200 m elevation. Other than *E. calendulina*, the only species of *Eucrosia* occurring at over 2000 m elevation is *E. stricklandii* (Baker) Meerow var. *montana* Meerow. *Eucrosia calendulina* is so far known from this single population.

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REFERENCES

- MEEROW, A.W. 1987. A monograph of *Eucrosia* (Amaryllidaceae). Syst. Bot. 12:460–492.